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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

REESE, DAVID C

ART UNIT PAPER NUMBER

3677

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/671,842

Applicant(s)

BROOKSHIRE, MICHAEL D.

Examiner

David C. Reese

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8,10,12-19,21,23-28,30 and 32-39 is/are pending in the application.
- 4a) Of the above claim(s) 6,12,17,26 and 32-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,8,10,13-16,18,19,21,23-25, 27-28 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to Applicant's amendment filed 3/1/2006.

Status of Claims

[1] Claims 1, 3-8, 10, 12-19, 21, 23-28, 30, and 32-39 are pending.

Election/Restrictions

[2] This application contains claims 6, 12, 17, 26, and 32-39 drawn to an invention and species nonelected without traverse in Paper No. 7/29/2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Drawings

[3] The drawing(s) were previously objected for informalities. In view of Applicant's replacement drawing(s) submitted on 3/1/2006, all previous objection(s) to the drawings have been withdrawn. Accordingly, the changes have been entered.

Specification

[4] The disclosure was previously objected to for informalities. Applicant has successfully addressed these issues in the amendment filed on 3/1/2006. Accordingly, the objection(s) to the specification have been withdrawn.

Claim Objections

[5] Claims 1, 13, and 23 are objected to because of the following informalities: It is unclear as to how the plurality of sets of facets in the dome-shaped crown has an equal number of facets in each set, as stated in lines 8-9 of claim 1, lines 9-10 of claim 13, and lines 5-6 of Claim 23. It

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appears from Figure 5 that the number of facets in each set varies from the girdle to the apex of the crown.

[6] Claim 3 recites the limitation "the crown" in line 3 of the instant claim. There is insufficient antecedent basis for this limitation in the claim.

Appropriate corrections are required.

Claim Rejections - 35 USC § 102

[7] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

[8] Claims 1, 5, 13-14, 17, 23-24, and 26 are rejected under 35 U.S.C. 102(b) as clearly anticipated by Stafford, US-D370642, because the invention was patented or described in a printed publication in this or a foreign country, or in public use or on sale in this country more than one (1) year prior to the application for patent in the United States.

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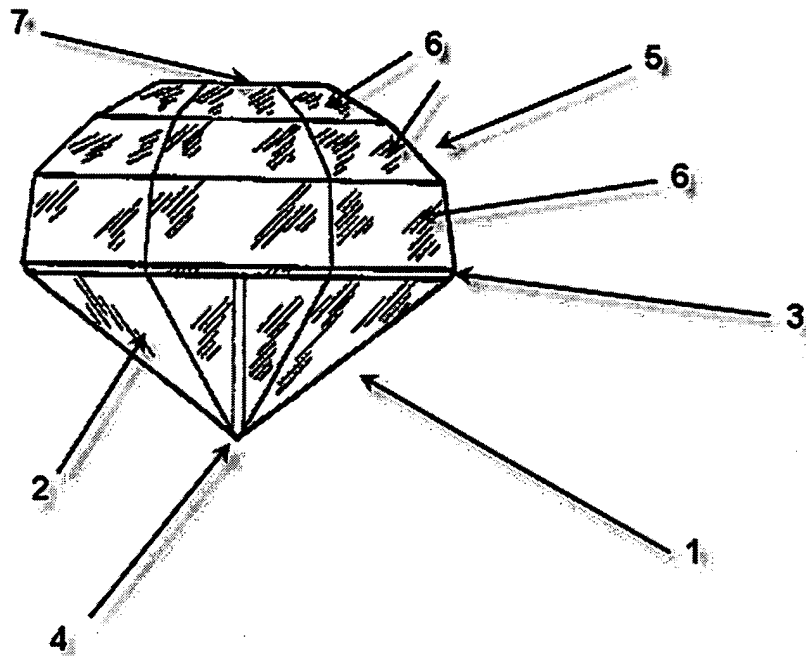
The shape and appearance of Stafford is identical in all material respects to that of the claimed design, *Hupp v. Siroflex of America Inc.*, 122 F.3d 1456, 43 USPQ2d 1887 (Fed. Cir. 1997).

As for Claim 1, Stafford teaches of a diamond (see figure below), comprising:

a pavilion (1) having a plurality of facets (2) disposed from a girdle (3) to a culet (4), each of plurality of facets (2) having a continuous flat surface extending from the girdle (3) to the culet (4), wherein an edge of a first adjoining facet (2) contacts an edge of a second adjoining facet (2) along a common radial boundary; and

a dome-shaped crown (5) disposed above the girdle (3), wherein the girdle (3) extends no further than a widest circumference of the dome-shaped crown (5) and the pavilion (1) extends no further than a widest circumference of the girdle (3), the dome-shaped crown (5) formed from a plurality of sets of facets (6) with an equal number of facets in each set, and the set of facets (6) cut with monotonically decreasing angles to form a stepped contour from the girdle (3) to an apex (7) of the dome-shaped crown (5), each of the sets of facets (2) having monotonically decreasing surface areas from the girdle (3) to the apex (7) of the dome-shaped crown (5).

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Re: Claim 5, wherein the pavilion (1) is substantially conical in shape.

As for Claim 13, Stafford teaches of a diamond (see figure above), comprising:

a pavilion (1) extending from a girdle (3) to a culet (4), wherein the girdle (3) extends no further than a widest circumference of the crown (5) and the pavilion (1) extends no further than a widest circumference of the girdle (3); and

a crown (5) in the form of a symmetrical hemisphere having a first set of facets (first 6) disposed above the girdle (3) and a second set of facets (second 6) disposed between the first set (first 6) of facets and an apex (7) of the crown (5), wherein the first set of facets (first 6) is cut at a first angle with respect to a reference line which is tangential to the apex (7) of the crown (5) and the second set of facets (second 6) is cut at a second angle with respect to the reference line

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which is less than the first angle, each of the sets of facets (first and second 6) having an equal number of facets (6).

Re: Claim 14, wherein each of the plurality of facets (2) of the pavilion (1) are symmetrically disposed and extend continuous from the girdle (3) to the culet (4).

Re: Claim 17, wherein the apex (7) of the crown (5) includes a star-shaped facet (as seen in Fig. 5).

As for Claim 23, Stafford teaches of a diamond (see figure above), comprising:
a pavilion (1) having a plurality of facets (2) disposed from a girdle (3) to a culet (4); and
a dome-shaped crown (5) disposed above the girdle (3), wherein the girdle (3) extends no further than a widest circumference of the dome-shaped crown (5) and the pavilion (1) extends no further than a widest circumference of the girdle (3), the dome-shaped crown (5) formed from a plurality of sets of facets (6) with an equal number of facets (6) in each set, the dome-shaped crown (5) has a stepped contour from the girdle (3) to an apex (7) of the dome-shaped crown (5).

Re: Claim 24, wherein each of the plurality of facets (2) of the pavilion (1) are symmetrically disposed and extend continuous from the girdle (3) to the culet (4).

Re: Claim 26, wherein the apex (7) of the crown (5) includes a star-shaped facet (as seen in Fig. 5).

Claim Rejections - 35 USC § 103

[9] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary

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skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[10] Claims 3-4, 15-16, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stafford, US-D370642, in view of case law.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for Claims 3-4, 15-16, and 25, Stafford teaches of the above claims.

The difference between the claim and Stafford is that Stafford does not expressly disclose that the plurality of facets of the pavilion are each cut to an angle of about 40.75 degrees (Claims 3, 15, and 25) and that said plurality totals at least sixteen in number (Claims 4 and 16).

It would have been an obvious matter of design choice to modify Stafford (by altering said angle and number of facets of the pavilion), since applicant has not disclosed that such a particular orientation creates any unexpected result. It appears that the invention would perform equally well as the invention disclosed by Stafford. It is extremely old, well known, readily apparent and profoundly obvious to change the size, shape, number, orientation, angles, percentages, and create ranges for facets and the gemstone in its entirety as to merely alter the aesthetics of said gemstone for the corresponding and resulting properties including brilliance, radiance, etc. for the utility of mere user preference. It is also extremely well known that altering said features will produce different properties radiating from said gemstone, depending on the changes and alterations made. Therein, once again, lies the pertinence behind such, as no

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unexpected result, viewed by one skilled in the art; will occur, with any of the above possible changes or alterations to any given gemstone.

[11] Claims 7-8, 10, 18-19, 20, 27-28, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stafford, US-D370642, in view of Almaraz, US-D443,244.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As for Claims 7-8, 10, 18-19, 20, 27-28, and 30, Stafford teaches of the above claims.

The difference between the claim and Stafford is that the claims recite: of the first set of facets being cut about 90 degrees, the second set being cut about 75 degrees (Claims 7, 18, and 27), the third set about 65 degrees, a forth set of facets being cut about 55 (56) and fifth set cut about 45 (46) degrees (Claims 8, 19, and 28 and 10, 20, and 30, respectively), all of which with respect to a reference line which is tangential to the apex of the dome-shaped crown. Almaraz discloses a dome-shaped structure with a plurality of sets of facets (a first through fifth set), said set of facets being cut with monotonically decreasing angles; as well as each set of facets having monotonically decreasing surfaces areas. It would have been obvious to one of ordinary skill in the art, having the disclosures of Stafford and Almaraz before him at the time the invention was made, to modify the crown of Stafford to include greater than three sets of facets, as in Almaraz. One would have been motivated to make such a combination because one would want to achieve that exact design (spiral design more specifically), as shown by Almaraz in Fig. 1. Further, with

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respect to the exact degrees being claimed for each set of facets, as described above, it would have been an obvious matter of design choice since applicant has not disclosed that such a particular orientation creates any unexpected result. It appears that the invention would perform equally well as the invention disclosed by Stafford in view of Almaraz. It is extremely old, well known, readily apparent and profoundly obvious to change the size, shape, number, orientation, angles, percentages, and create ranges for facets and the gemstone in its entirety as to merely alter the aesthetics of said gemstone for the corresponding and resulting properties including brilliance, radiance, etc. for the utility of mere user preference. It is also extremely well known that altering said features will produce different properties radiating from said gemstone, depending on the changes and alterations made. Therein, once again, lies the pertinence behind such, as no unexpected result, viewed by one skilled in the art; will occur, with any of the above possible changes or alterations to any given gemstone.

Response to Arguments

[12] Applicant's amendment, see amendment and remarks filed 3/1/2006, with respect to the rejection(s) of claim(s) under Meyer and Freiesleben have been fully considered. Upon further consideration of the amended claims, however, a new ground(s) of rejection is made in view of Stafford, US-D370642, and then in view of Almaraz US-D443,244. Consequently, all arguments are considered moot to said new grounds of rejection.

Examiner has submitted another notice of reference cited, and would also like to state that in the event that there is allowable subject matter, said subject matter may reside more in the design aspects of the invention.

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Conclusion

[13] Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

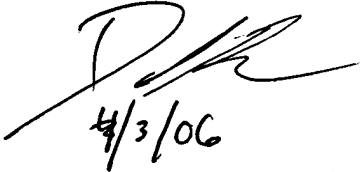
[14] Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Reese whose telephone number is (571) 272-7082. The examiner can normally be reached on 7:30 am-6:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached at (571) 272-7075. The fax number for the organization where this application or proceeding is assigned is the following: (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Reese
Assistant Examiner
Art Unit 3677

DCR



4/3/06



ROBERT J. SANDY
PRIMARY EXAMINER